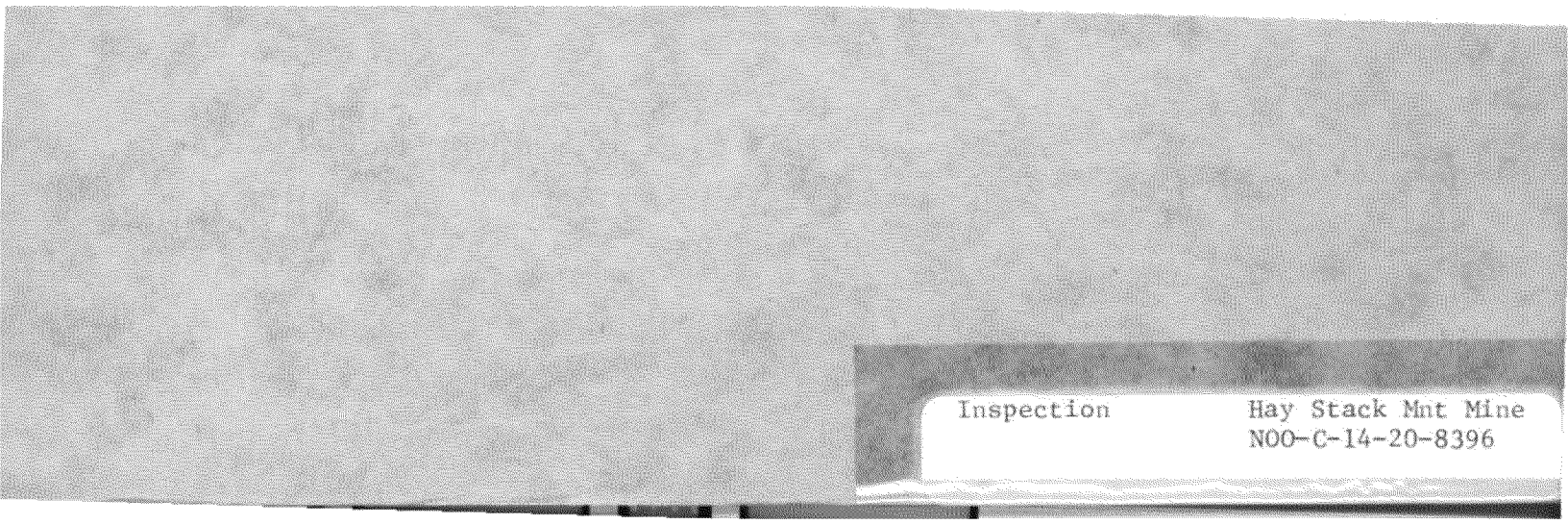

Inspection
Hay Stack Mnt Mine
NOO-C-14-20-8396

DMO Albuquerque STATE NM DATE OF INSPECTION April 16, 1985

SERIAL NUMBER OF TRACT	HOLDER OF PRIMARY TRACT INTEREST	TRACT STATUS	NUMBER OF INSPECTIONS	HOURS OF INSPECTION ONSITE/TOTAL	COMMODITY	TRACT TYPE
COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6	COLUMN 7
N00-C-14-20-5681	TEDCO	Aban.	1	1.5 / 2.5	Uranium	Lease
N00-C-14-20-8396	TEDCO	Aban.	1	1.5 / 2.5	Uranium	Lease
				/		
Tess 1-10	TEDCO	Aban.	1	1 / 1.0	Uranium	Mining Claims
				/		
				/		
				/		
				/		
				/		
				/		

TYPE OF INSPECTION (CHECK ONE) / / MINE / XX / EXPLORATION / / MINE ABANDONMENT
/ / TECH EXAM, EA / / INACTIVE / / OTHER

PURPOSE OF INSPECTION Examination of lease to determine if necessary reclamation for relinquishment was completed.

BRIEF DESCRIPTION OF INSPECTION See attachment.

MINE NAME _____ DESIGNATED OPERATOR _____

DATE ORIGINAL MINE PLAN SUBMITTED _____ DATE ORIGINAL MINE PLAN APPROVED _____

DATE MODIFIED MINE PLAN SUBMITTED _____ DATE MODIFIED MINE PLAN APPROVED _____

IF APPROVED PLAN IS PENDING MODIFICATION, GIVE BRIEF DESCRIPTION OF MODIFICATION: _____

DATE ORIGINAL EXPL. PLAN SUBMITTED _____ DATE ORIGINAL EXPL. PLAN APPROVED _____

DATE MODIFIED EXPL. PLAN SUBMITTED _____ DATE MODIFIED EXPL. PLAN APPROVED _____

BLM INSPECTOR(S) AND TITLES(S) George R. Tetreault, Jr., Mining Engineer; Brian Lloyd, Volunteer; John Andrews, E.S.

SURFACE MANAGEMENT AGENCY FOR TRACT(S) Bureau of Indian Affairs

NAME, TITLE, AND OFFICE OF SMA PERSONNEL PARTICIPATING IN INSPECTION None.

NAME, TITLE, AND OFFICE OF OSM OR REGULATORY AUTHORITY PERSONNEL PARTICIPATING IN INSPECTION None

NAME, TITLE, AND OFFICE OF COMPANY REPRESENTATIVE(S) PARTICIPATING IN INSPECTION Norm Derks

HOURS OF OFFICES TIME (PRE-INSPECTION) PREPARING FOR INSPECTION 0

HOURS OF OFFICES TIME (POST-INSPECTION) REPORTING ON INSPECTION 1

TOTAL TRAVEL TIME 2.0 TOTAL OFFICE TIME 1

WAS A CONDITION OF NONCOMPLIANCE ENCOUNTERED DURING INSPECTION? / / YES / XX / NO
IF YES, PREPARE NONCOMPLIANCE REPORT

WAS AN UNDESIRABLE EVENT ENCOUNTERED DURING INSPECTION? / / YES / XX / NO
IF YES, PREPARE UNDESIRABLE EVENT REPORT

PERSONNEL RESPONSIBLE FOR CONDUCTING INSPECTION (ORIG. SGD.) GEORGE R. TETREAULT, JR.
George R. Tetreault, Jr.

cc: Superintendent, ENA, BIA
Oper. File: Allotted (#'s above), TEDCO
IR File
File: Tetreault

Lease -8396

All reclamation has been completed. All exploration drill sites have been reclaimed. The road constructed on Haystack Mountain was reseeded and blocked. The old Federal Mine was operated on the site prior to leasing to TEDCO. There were two open adits which TEDCO agreed to reclaim. They did an excellent job of blocking and reclaiming the two adits and should be commended. Both of the former mine sites are in the range of 100-200 uR/hr. The Southwest mine site has an allottee's home on it. In the area of the two adits are hotspots that range 200-400 uR/hr. On the site of an old ore storage pad, there is a spot measuring 480 uR/hr. On the roads there are numerous hotspots between 70-100 uR/hr. In some places it looks like the company operating the mine used ore/waste to grade the roads.

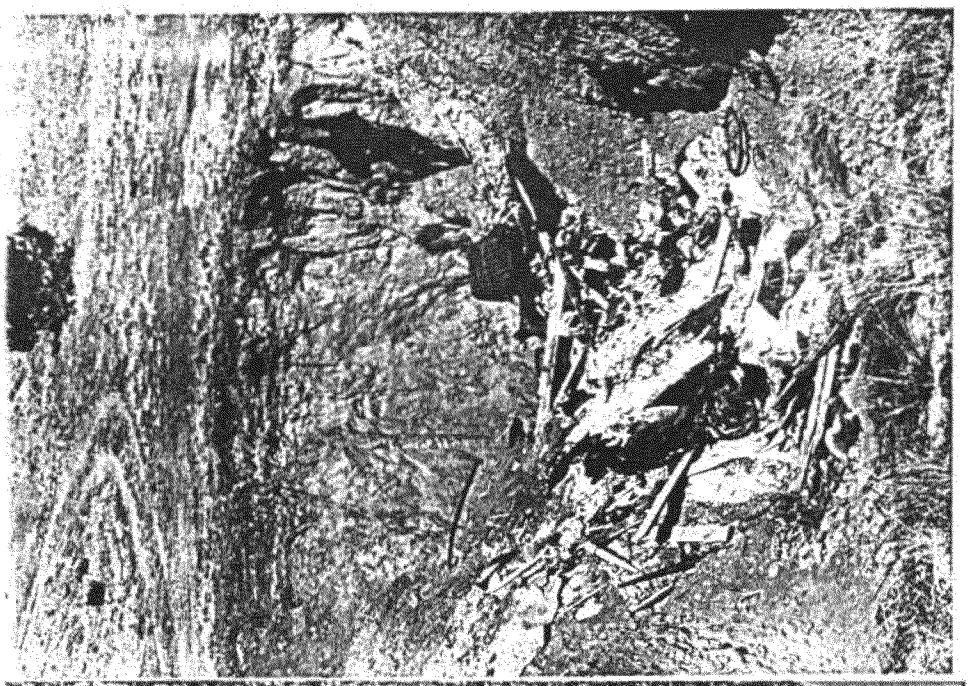
Lease -5681 Claims

All reclamation has been completed. All exploration drill sites have been reclaimed. The road constructed on Haystack Mountain was reseeded and blocked.

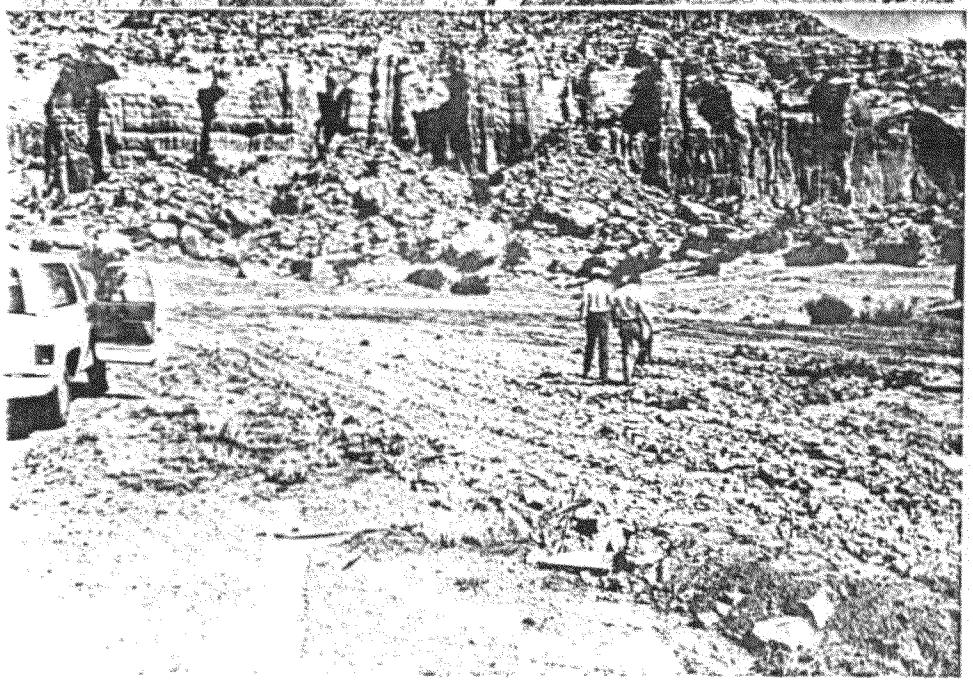
Tess 1-10

The roads constructed for exploration on these claims have been reseeded and blocked. All drill sites reclaimed.

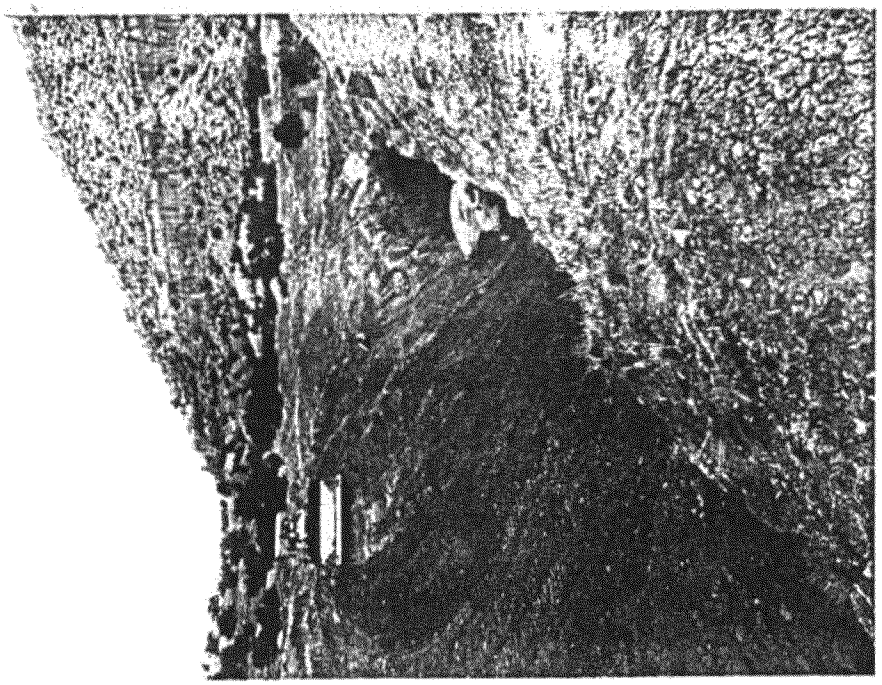
Will recommend release of these leases to BIA. Also recommend that the BIA have a radiation study done on Lease -8396 in order to determine what future reclamation should be done and which areas are safety hazards and should be avoided by the allottees.



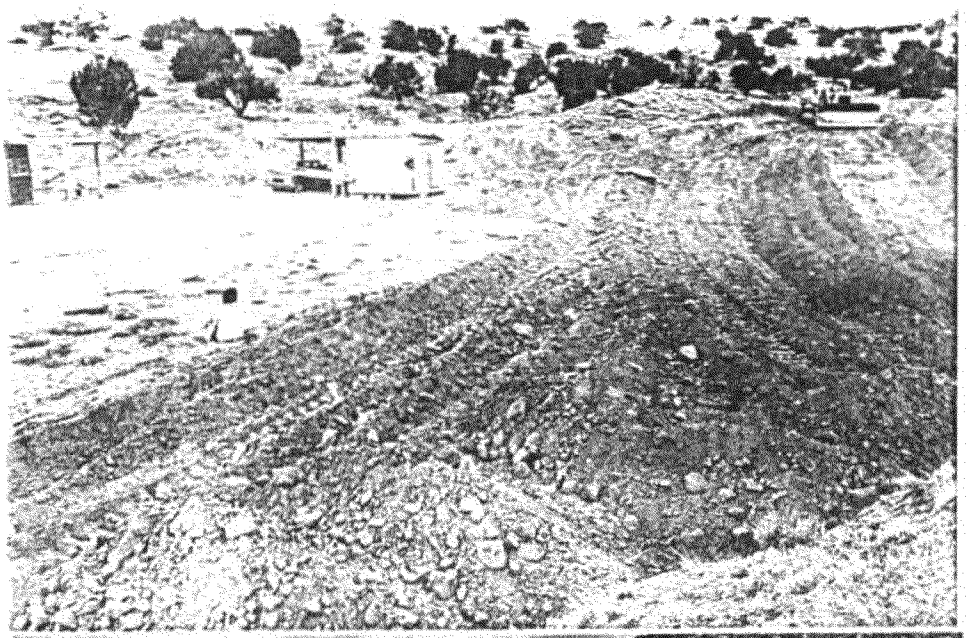
The ore haulage adit



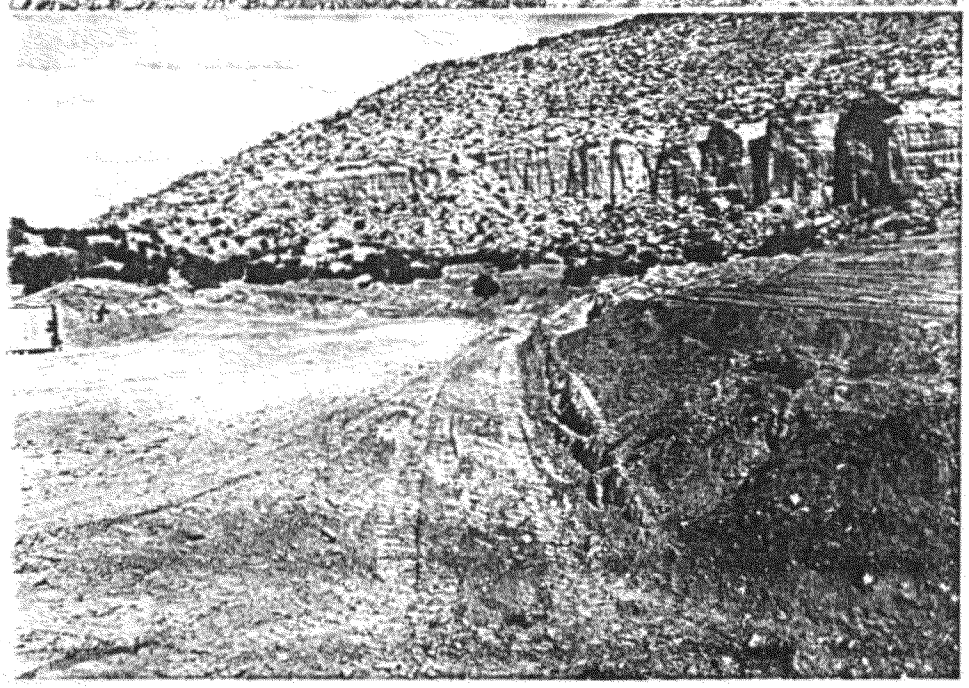
The reclaimed steel and ore haulage adit



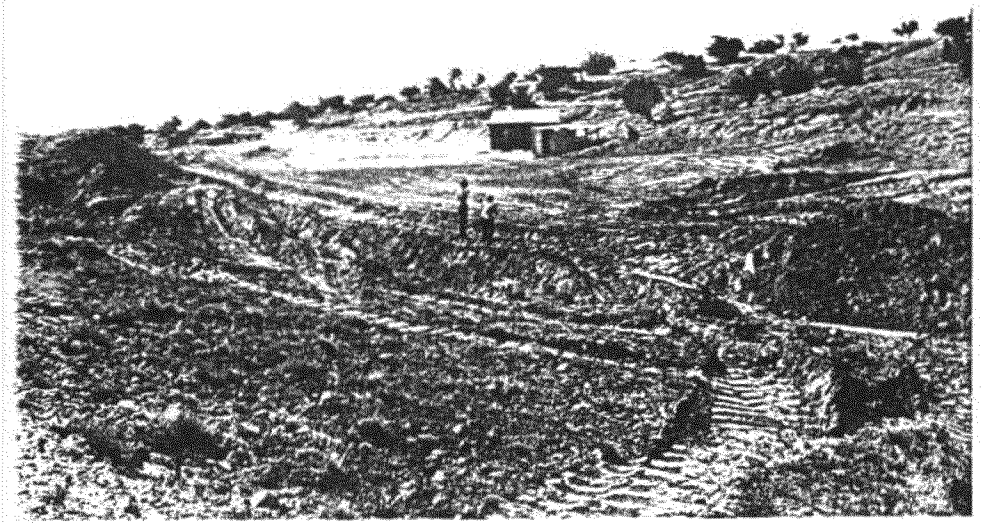
The main adit of the old Federal Mine



Reclamation of the main adit

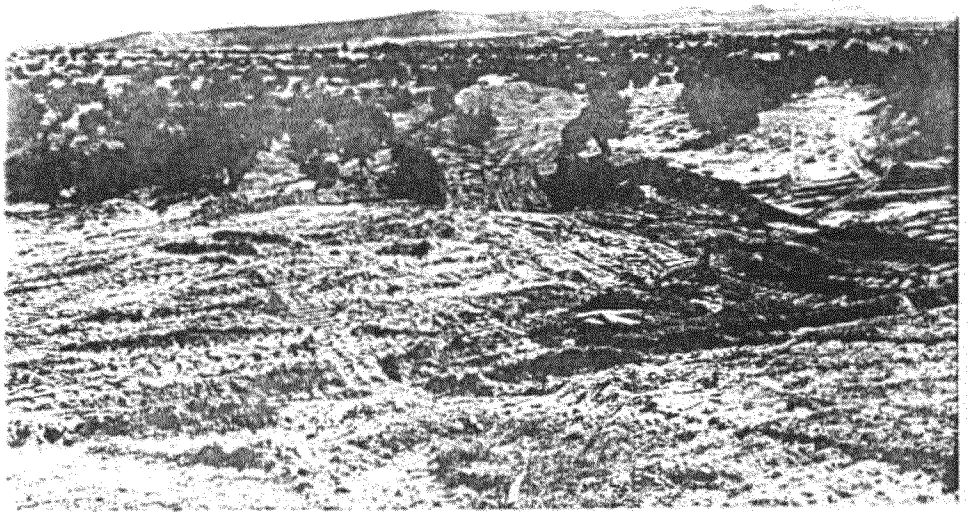


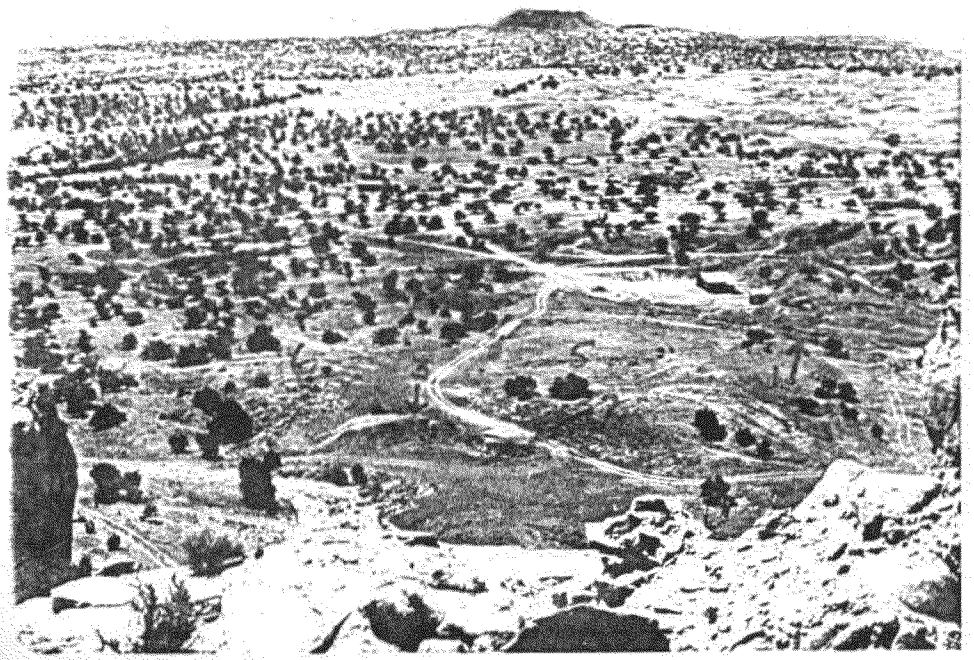
Fully reclaimed adit



Looking east across the reclaimed main adit site

The reworked collapsed stope area





The site of the old General Mine:

1. Main adit
2. Ore haul adit
3. Tipel
4. Collapsed stope are
5&6. Old ore pad & waste areas

INSPECTION REPORT
April 12, 1977

Mesa No. 2 Mine
Navajo Allotted Lease
14-20-0603-7240
McKinley County, New Mexico

U. S. Geological Survey
Conservation Division
Area Mining Supervisor
Southern Rocky Mountain Area
P. O. Box 1716
Carlsbad, New Mexico 88220

Dale C. Jones
Mining Engineer
May 5, 1977

The Mesa No. 2 Mine was examined April 12, 1977, to verify reports that the abandoned mine's incline portal was not sealed. The writer was accompanied temporarily by George Warnock, President of Todilto Exploration and Development Corporation (Tedco). Tedco currently strip mines uranium ore from the nearby Haystack Mine which is located on property owned by the Santa Fe Pacific Railroad Company.

The Mesa No. 2 Mine is located at the base of Haystack Mountain in the southwest quarter of Section 18, T12N, R10W, NMPM, McKinley County, New Mexico (Map A). It can be reached by traveling Highway 66 north from Grants for approximately 17.5 miles and then a dirt road east for about 5 miles.

The quarter-section tract was formerly Navajo Allotted Uranium Mining Lease 14-20-0603-7240 which expired under its own terms October 12, 1972. The last operator of record was Cibola Mining Company which acquired the lease April 16, 1966, via assignment from Mesa Mining Company (Homer Scriven, General Manager). About 15 years prior to that, the mine was operated by Federal Uranium Company for approximately 4 years and was known as the Federal Mine. The land is not presently under lease.

The ore produced by the mining operations was located in the Todilto Limestone of Lake Jurassic Age. Production was evidently sporadic, ranging from 100 to 300 tons of ore per month according to a USGS mine inspection report of June 2, 1964. Records in this office show that Cibola Mining Company produced 141.25 tons of ore from the property in June and August of 1966 and that no further production was obtained after August 1966. According to various USGS memorandum and mine inspection reports dated as late as March 28, 1969, the mining property had not been satisfactorily conditioned for abandonment, and efforts to contact officials of the Cibola Mining Company were unsuccessful.

According to mine maps and Bureau of Mines' Health and Safety Inspection Reports, the mine consisted of two adjacent, but unconnected, underground workings which were developed through separate declines. The workings extended from the declines to the northwest, south and southwest, with the majority of the mining apparently occurring under Haystack Mountain. The northeast incline is about 280 feet long on a downgrade of approximately 22 degrees. It was equipped with a 60-horsepower, diesel-driven hoist for handling material only. The southwest decline is about 420 feet southwest of the northeast decline and was approximately 55 feet long on a gentle downgrade of perhaps about 10 degrees. This incline does not appear to have been equipped with a hoist. There were two buildings near the northeast decline, but they were removed sometime in 1964. One small plywood and tin building is still located near the southwest decline.

The portal of the southwest decline has been sealed, apparently by backfilling the opening with waste rock and dirt. Some timbering has been placed on top of the fill to support part of the portal, but there are no visible means of entry into the mine workings. The rock around the portal brow could be dangerous. The beginning cut of the incline remains open but does not appear to be dangerous as the cut is in consolidated rock. Garbage, evidently from nearby residences, is accumulating in the cut. A large pile of dirt, and possibly waste rock, is located at the entrance of the cut.

The northeast incline is partially sealed by a small cave-in at the portal, but it would be possible, and very dangerous, to enter the mine workings. The ground around the portal appears to be mostly very unconsolidated dirt which could cave very easily. This creates a safety hazard due to the close proximity of occupied residences. A flat-topped pad of waste rock and timbers is located near the incline entrance and evidently accommodated the diesel hoist. Directly behind this pad to the southeast is a small concrete pad which was evidently the floor of the small general purpose building. A low waste dump is situated southeast of the incline.

The surface area around the inclines has been distorted by various roads, grading, etc. The writer did not find any of the mine's ventilation holes, but past USGS inspection reports indicate that there are several which still remain open. The writer also did not inspect a deep trench that is about 500 feet southeast of the southwest decline. According to a USGS inspection report, this trench was made by Cibola Mining Company and abandoned by order of the State Mine Inspector. The condition of this trench is not known, but it is assumed that it too remains open.

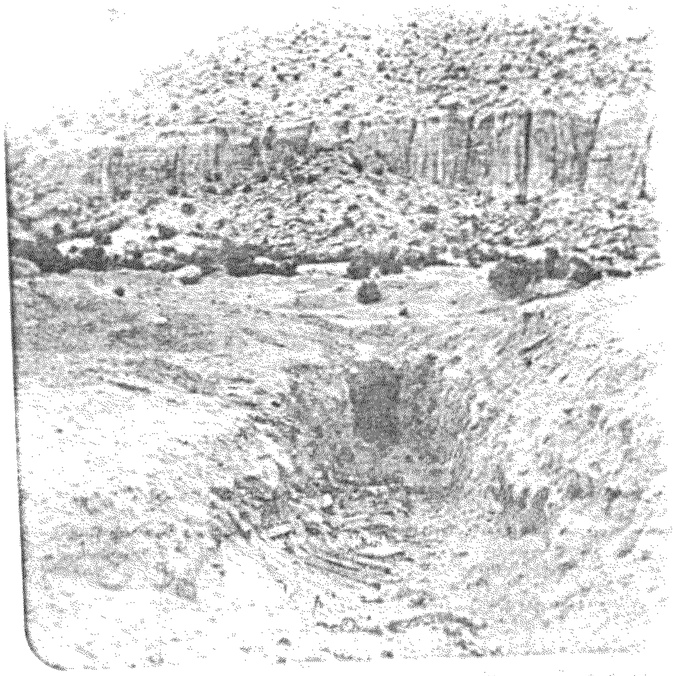
As previously stated, the involved lands are not currently under lease. The previous lease expired October 12, 1972, and it is assumed that the $2000 surety bond was also cancelled at that time. The BIA will be contacted about the exact status of the bond. However, the condition of the northeast incline constitutes a serious safety hazard, and the writer recommends ~~that the writer recommends~~ that the appropriate agency take immediate action to mitigate this situation. Specifically, the northeast incline portal area should be fenced to prevent access, and all ventilation holes should be located to determine their condition as they too may require fencing. In addition, the deep trench made by Cibola Mining Company should be located to determine if any immediate mitigative measures are necessary.

Mr. Warnock expressed interest in obtaining a lease on the mining property. Perhaps it would be in the best interests of the landowner, in regards to both safety and potential royalty income, to consider the negotiation of a mining lease with Tedco. As mentioned previously, Tedco operates the Haystack Mine about 0.5 miles to the south-southwest.

Dale C. Jones
Mining Engineer

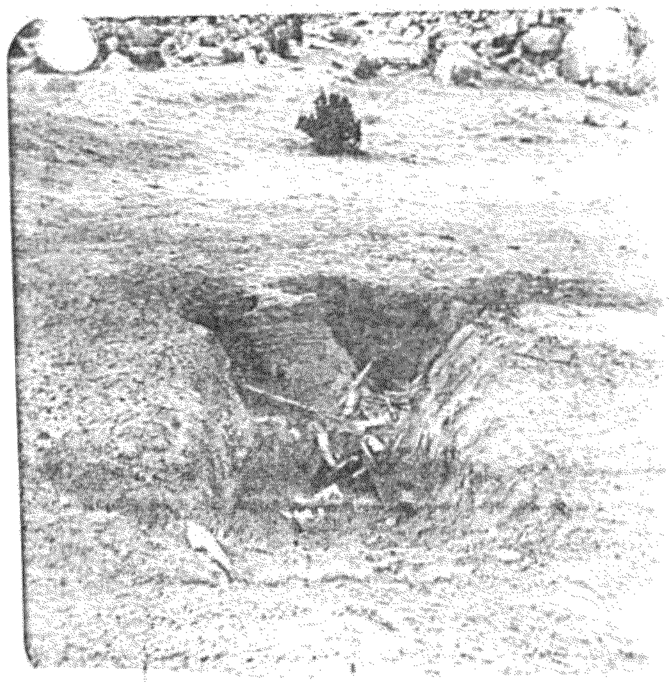
DCJ:cj

Orig. to: Superintendent, Eastern Navajo Agency, BIA
cc: Area Director, Navajo Area Office, BIA
Chief, Branch of Mining Operations, USGS
Through: Conservation Manager, Central Region, USGS
Area Mining Supervisor, SRMA, USGS
Files

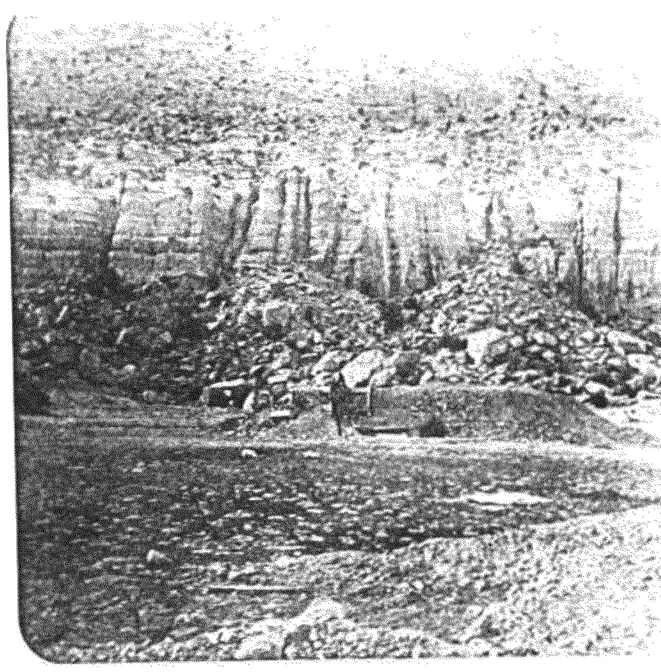


Southwest incline of [illegible] No. 1 Mine
looking [illegible] [illegible] [illegible] in background

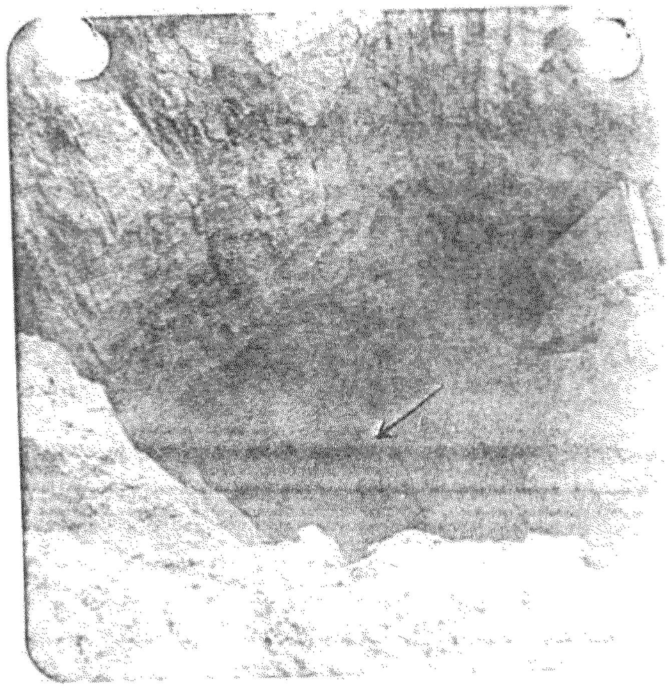
Small mine building near southwest
incline shown in photo above



Northeast incline [illegible] (looking [illegible] from top of hoist pad). Base of Haystack Mountain in background. Timbers of hoist pad visible in lower left corner of photo



Hoist pad directly behind northeast incline. Haystack Mountain in background. Part of waste dump visible in lower right corner of photo



Looking down into northeast incline, [illegible] portal caved in; entry to incline possible through hole (arrow)

Same as photo above from a different angle; hole (arrow) is the same as in photo above

DEM - mining MN - 839 6

United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Box 69
Albuquerque, New Mexico 87103

Mine Examination Report
Todilto Exploration and Development Corporation
Haystack Mine
Navajo Allotted Uranium Lease
NOO-C-14-20-8396
Section 18, Township 13 North, Range 10 West, N.M.P.M.
McKinley County, New Mexico
April 20, 1981

David Sitzler, Mining Engineer, and I inspected the captioned mining operation April 16, 1981. We discussed the mining activities with Mr. Tom Roman, Mine Foreman, and examined the underground workings with Mr. Toren Olsen, Mine Geologist. The purpose of the inspection was the examination of the mining performed, and this was the first inspection since the operations were approved in September 1980.

For several years, Todilto Exploration and Development Corp., has operated the Haystack Mine in Section 13, T. 13 N., R. 11 W., and Section 19, T. 13 N., R. 10 W. Both open-pit and underground mining methods have been used, but present activities are confined to underground workings in Section 13. This mining has been performed under mineral leasing agreements between TEDCO, the Department of Energy, and the Santa Fe Railroad Company. The surface rights for these tracts are reserved for the Navajo Indian Tribe by PLO 2178.

TEDCO obtained Navajo Allotted Uranium Lease NOO-C-14-20-8396 for the SW/4, Section 18, T. 13 N., R. 10 W., through direct negotiation with the allottee. The lease was issued March 24, 1980, and shortly thereafter, TEDCO requested approval of both an exploration plan and an interim mining plan for the leasehold. The exploration plan provided for the surface drilling and probing of as many as 1,165 boreholes, and it was approved June 23, 1980. TEDCO has now completed about 330 boreholes within the lease. The interim mining plan provided for limited extension of the underground mining in adjacent Section 13 into lease -8396, to explore and develop the projected ore trend. All required equipment, personnel, and surface facilities were to be provided by the Section 13 operations. The plan was conditionally approved September 23, 1980.

Lease -8396 lies at the base of Haystack Mountain, a mesa elongated in an east-west direction. Elevations range from 7,833 feet at the top of Haystack Mountain to about 7,000 feet toward the southeast corner of the lease. Surface drainages are small intermittent arroyos that flow southwest and southeast only during periods of excessive precipitation.

The climate of the area is semi-arid. The average annual precipitation of about 12 inches occurs mostly as rain in July and August. The annual

snowfall approximates 17 inches. Sunshine is abundant, and the relative humidity is characteristically low. The prevailing wind direction normally parallels the valleys and the average annual wind velocity is about 10 mph.

The Lease lies in a transition zone containing pinyon-juniper woodland and grassland. The woodland species are restricted primarily to the escarpments and higher elevations while the sparse grasses occur on the lower slopes and hills. Wildlife species in the area are restricted to birds, reptiles, and small mammals characteristic of pinyon-juniper and grassland habitats.

Vehicular access in the area is provided by improved and unimproved dirt roads that lead primarily to paved State Highway 53 to the east, and U. S. Highway 66 to the west. The land in and around the Lease is used primarily for residences and the grazing of livestock, mostly sheep and goats. Numerous open-pit and underground uranium mines operated in and around the Lease between 1950 and 1972; underground mining within the Lease itself produced approximately 25,000 tons of ore averaging 0.15 - 0.19 percent U_3O_8 during this time period. The prolific Ambrosia Lake uranium mining area is about 10 - 20 miles to the east.

The uranium host in the Haystack Mine is the Todilto Limestone Member of the Upper Jurassic San Rafael Group. The Todilto ranges in thickness from 0 to 85 feet, bounded by the lower Entrada Sandstone Member and intertonguing with the Upper Summerville Sandstone Member. Generally, uranium mineralization in the Todilto Limestone occurs as flat, tabular deposits with irregular outlines in the top portion of the Member. Ore thickness rarely exceeds one to three feet, and grade varies widely, tending to be higher in the center of the deposits. Some of the ore deposits are quite uniform while others are erratic, small pods. Average depth to the ore within Lease -8396 is 100 to 120 feet. Mr. Roman noted that the high-grade ore (four and ten-foot thicknesses of about 0.14 - 0.15 percent U_3O_8) indicated by two exploration boreholes, was encountered in the mine workings. The ore occurred in two small anticlinal folds, and both zones were only about four to five feet wide.

The Haystack Mine operates two 8-hour shifts per day, five days per week, with a total workforce of 17 people. Ore production averages about 2,000 tons per month. The mining cutoff grade is 0.10 percent U_3O_8, but ore as low as 0.05 percent U_3O_8 will be recovered if broken. At the time of this inspection, the mining operations in Lease -8396 had been stopped. The ore encountered in the Lease was very spotty, and the 1,900 tons mined averaged only about 0.09 percent U_3O_8. This low grade, coupled with the declining price of uranium, made the operations in the Lease uneconomical. When the operations were active, four miners worked in the Lease two shifts per day, five days per week. Mr. Roman noted that all but 50 - 60 of the 1,900 tons mined had been shipped to the mill. He does not anticipate re-entering the Lease until the price of uranium is back up to at least $30 per pound.

Access to the Haystack Mine is provided by the West Portal in Section 13. From this Portal, the 9-foot high by 11-foot wide 1200 Haulage Drift heads easterly to provide the main passageway to the underground workings for mining equipment and personnel, compressed air and water pipes, electrical lines, and exhaust ventilation. The Haystack Section 13 workings branch off the 1200 Haulage Drift to the north and south about 600 feet east of the West Portal. Fresh intake ventilation air for the Mine is provided by a 4-foot square vent raise driven on a 45° angle to the surface about 1000 feet east of the West Portal, and two 18-inch vent holes drilled vertically from the surface about 1400 feet east of the Portal. Both of these downcast ventilation entries are equipped with electric fans at their intersections with the 1200 Haulage Drift. Access into Lease 8396 was provided by extending the 1200 Haulage Drift east into the Lease about 85 feet, and fresh air was routed into the workings by flexible ventilation tubing in the Drift. When active, approximately 30,000 cfm of fresh air were routed into the workings in Lease -8396.

Due to the thin nature of the ore in the Todilto Limestone, TEDCO uses modified room-and-pillar mining on retreat with split shooting in both development and pillar extraction. Generally, 8-foot square development drifts and crosscuts are driven east-west and north-south respectively, to develop rectangular development blocks approximately 50 by 90 feet. Development blocks containing ore are then split by east-west crosscuts seven feet high by ten feet wide into rectangular ore pillars about 20 by 50 feet. After development is complete, the ore pillars are extracted by slabbing the pillars into the development drifts and crosscuts on retreat from the ore zones toward the 1200 Haulage Drift. Both development and pillar extraction are conducted using conventional drilling and blasting with pneumatic jackleg drills and diesel-powered, rubber-tired LHD's and haulage trucks. Ground support is minimal with the natural pillar supports being supplemented by split-set rock bolts with wire mesh, headboards, or steel mats, and timber stulls and/or cribbing as necessary.

Since the uranium ore in the upper portion of the Todilto Limestone is very thin, split shooting is used to carefully control ore dilution during both pillar development and extraction. In pillar development, all drifts and crosscuts are driven so that the ore zone is located in the upper portions of the entry cross-sections. Each round is probed by a geologist, and the ore zone is marked on each face with paint. The lower portion of each round, or the waste, is shot out from under the ore first and mucked out. The ore, or upper portion of each round, is then popped down and trammed to the surface. The same procedure is used in pillar extraction and actually constitutes hand sorting of the ore for close grade control.

Ore trammed to the surface is placed on one of three stockpiles according to grade (0.04 - 0.07 percent U_3O_8, 0.071 -0.10 percent U_3O_8, and 0.101 percent U_3O_8 and above). Muck probing less than 0.04 percent U_3O_8 is considered waste and is gobbed into abandoned workings or placed on the

dump near the West Portal. The ore in the surface stockpiles is blended to produce the most economic grade for shipping, and then transported to the United Nuclear-Homestake Partners' Mill at Ambrosia Lake. This is the only facility in New Mexico capable of milling limestone ore, and TEDCO sells only the crude ore to either United Nuclear Corporation or Homestake Mining Company. The buyer tolls the ore through the partnership mill and sells the concentrate produced.

No violations of the lease terms, interim mining plan, or Federal regulations were observed during this inspection. The 1200 Haulage Drift was extended east into Lease -8396 about 85 feet (see enclosed map). Pillar development, as described above, was then extended about 160 feet to the north, and 320 feet to the south. In the north, development extended about 90 feet east, and development in the south was driven about 120 feet east. A second east-west connection with the Haystack Section 13 workings was made 120 feet south of the 1200 Haulage Drift. This development is within the limits set in the approvals of the intermin mining plan and subsequent modifications. Also, as specified in those approvals, no pillar extraction was conducted, and the boundaries of Lease -8396 were adequately marked in the two drifts connecting the mine workings. Ore from the Lease has been segregated from the other Haystack ore; however, due to the low grade of the ore, only two stockpiles are being used (0.05 - 0.099 percent U_3O_8 and 0.10 percent U_3O_8 and above). Monthly ore production has been reported to this office, and correct royalties have been paid on the first lot of ore shipped to the mill (Lot 9449-495.56 dry tons). No waste dumps, ore stockpiles, or other surface facilities have been placed on the surface of the Lease, and no complaints about the mining operations have been submitted to this office. As previously noted, the mining operations within the Lease have been stopped due to poor economic conditions.

After the mine inspection, we briefly examined the abandonment of the exploration boreholes in Lease -8396. It appears that TEDCO has plugged all of the boreholes, but considerable reclamation (contouring, grading, and seeding) must be performed before abandonment is complete. TEDCO has done a very good job of plugging and marking the boreholes. No drilling operations were in progress at the time.

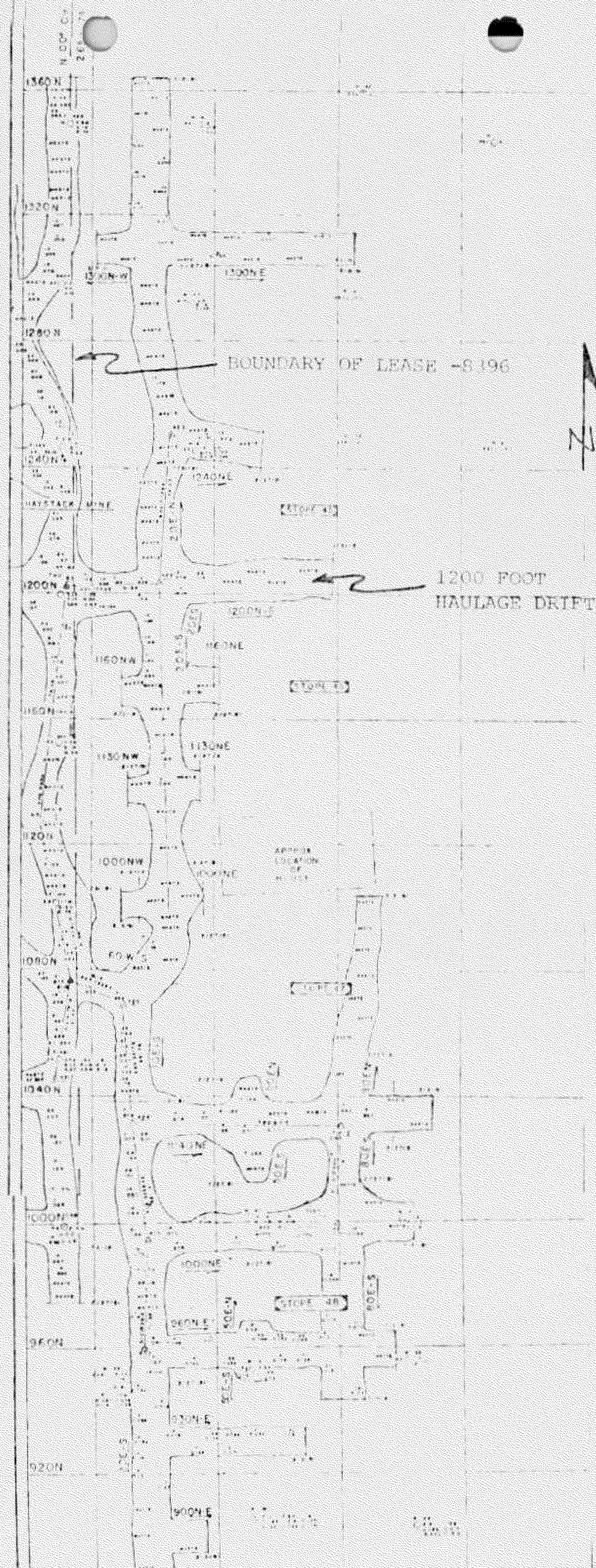
(ORIG. SGD.) DALE C. JONES

Dale C. Jones
District Mining Supervisor

Enclosure

cc: DCM--Mining, SCR (W/Encl.)

DCJones:ab: 04-20-81


1360N
1320N
1300N-W
1300NE
1280N
BOUNDARY OF LEASE -8396
N
1240N
1240NE
HAYSTACK MINE
1200N
1200 FOOT
HAULAGE DRIFT
1200N-E
1160NW
1160NE
1160N
1130NW
1130NE
1120N
1000NW
1080N
1040N
1000N
1000NE
960N
960N.E
930N-E
920N
900N.E

9-375
(Formerly 9-128 and 9-374)
(Rev. Dec. 1956)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form Approved
Budget Bureau No. 42-R1243.2

NOO-C-14-20-
Serial No. 8396
Land Office USGS

Prospecting Permit Report for ~~Month~~ ~~Quarter~~ Year Ending December 31, 1980 Mineral Uranium

Navajo-allotted uranium lease NOO-C-14-20-8396, SW¼, Section 18, T13N, R10W, NMPM
Todilto Exploration & Development Corporation

RECEIVED
APR 20 1981
U.S. GEOLOGICAL SURVEY
ALBUQUERQUE, NEW MEXICO

(Submit one copy of this report to Regional Mining Supervisor, U. S. Geological Survey, before the end of the month following the report period)

	Designation or Name of Prospect	Feet Driven or Sunk			Thickness of Ore Body	State if Prospect Is Completed or Abandoned
		This ~~month~~ year	Previously Reported	Total to Date		
Bore Holes	330 329 Holes	27,830	-0-	27,830		
Open Cuts						
Shafts or Slopes						
Drifts or Tunnels						

Samples taken for analyses or examination during period, number .....
(Bore holes in or through migratory or valuable deposits are to be cemented and abandoned under the directions of the Regional Mining Supervisor)

List maps, logs, samples, and analyses included with this report: Copies of drill hole summary maps 103-007-015-SW¼-D-1, D-2, D-3 and D-4. Lithographic logs were submitted with the annual report dated January 22, 1981.

Cost of prospecting and development work done during ~~month~~ year 12/31/81 $ 69,929.81

Permittee is requested to furnish in duplicate a map or sketch indicating position of drill holes, shafts, drifts, or slopes with reference to Government lands, giving the thicknesses of deposits found. Copies of the analyses, logs of all test holes, shafts, and tunnels are to be submitted in duplicate to Regional Mining Supervisor immediately upon completion, or on the suspension of work on them for an indefinite time. Abandonment forms are to be submitted for bore holes.

PRODUCTION AND SALES as of December 31, 1980

Product	Grade	Tons Produced	Tons in Storage	Tons Disposed Of	Unit Value at Point of Shipment	Total Value of Product Disposed Of	Royalty at % or ¢ a Ton
-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-

Name Richard A. Trout Title Technical Coordinator Date 4/9/81

18 U. S. C., section 1001, makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

U.S. GOVERNMENT PRINTING OFFICE : 1962 O—665829

SOUTHERN ROCKY MOUNTAIN AREA - CARLSBAD, NEW MEXICO

EXPLORATION EXAMINATION REPORT

Lease or Permit No. NOO-C-14-20-8396 Land Ownership Navajo Allotted

Lessee or Permittee Todilto Exploration and Development Corporation

Examiner Dale C. Jones, Mining Engineer Date of Examination July 24, 1980

Mineral & Geologic Target Uranium in Jurassic Todilto Limestone

Location SW/4, Sec. 18, T. 13 N., R. 10 W., N.M.P.M., McKinley County, NM

Active Exploration in Progress Inactive

Method of Prospecting Rotary drilling and downhole probing

Approved Prospecting Plan Being Followed: Yes 6/23/80 No

Type of Surface Disturbance Access trails and drill sites

Restoration of Disturbed Surface None, exploration has just begun

Method of plugging drill holes: Bore holes temporarily plugged with wood plugs

Method of drill hole cuttings disposal: Will be placed in holes; excess cuttings will be spread out on surface.

Number of drill holes examined: Active Approximately 10

Abandoned

Number of drill holes completed: Approximately 50

Number of drill holes planned for program: 165

Artesian flow Yes No X

Type of logs run: Gamma Ray

Number of core samples taken for analysis: None

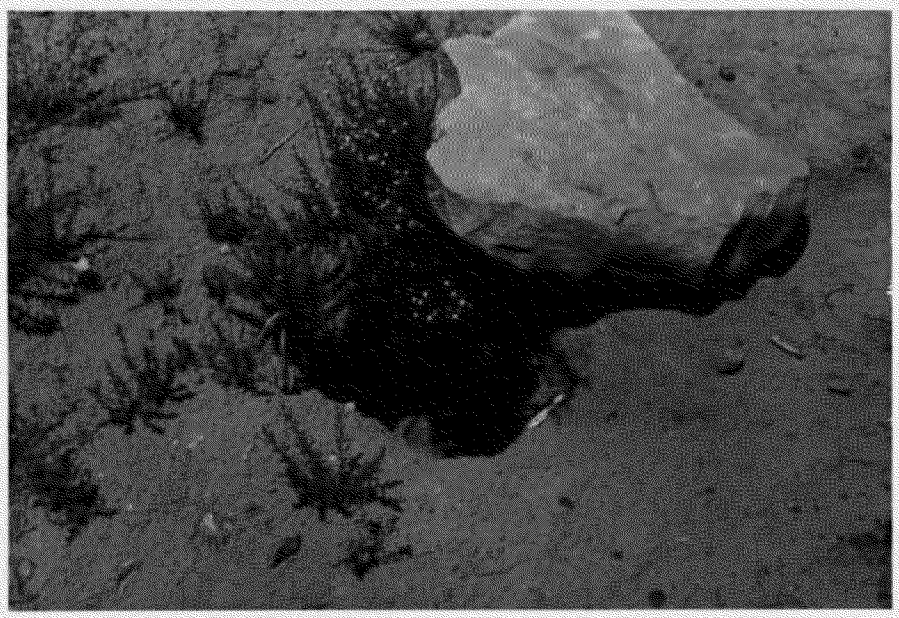
Comments: Accompanied by Tim Pearson, TEDCO Geologist; exploration in progress; abandonment and reclamation probably will not occur until main exploration program has been completed; no violations of lease terms or exploration plan were observed.

cc: Area Dir, Navajo Area Office, BIA
DCM, Mining, SCR
Field File - Jones

Dale C. Jones
July 28, 1980

New Access Road and Drill Site
in Lease NOO-C-14-20-8396 (Borehole
has not yet been completed)

Rotary Drilling Rig in Operation in
Lease NOO-C-14-20-8396



Open Ventilation Borehole in Lease
NOO-C-14-20-8396 (Borehole Completed
During Underground Mining Operations
Under a Previous Lease)

Recently Completed Exploration Borehole
in Lease NOO-C-14-20-8396

Recently Completed Exploration Borehole
in Lease NOO-C-14-20-8396

Recently Completed Exploration Borehole
in Lease NOO-C-14-20-8396

DSO Albuquerque STATE NM DATE OF INSPECTION April 16, 1985

SERIAL NUMBER OF TRACT	HOLDER OF PRIMARY TRACT INTEREST	TRACT STATUS	NUMBER OF INSPECTIONS	HOURS OF INSPECTION ONSITE/TOTAL	COMMODITY	TRACT TYPE
COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6	COLUMN 7
N00-C-14-20-5681	TEDCO	Aban.	1	1.5 / 2.5	Uranium	Lease
N00-C-14-20-8396	TEDCO	Aban.	1	1.5 / 2.5	Uranium	Lease
				/		
Tess 1-10	TEDCO	Aban.	1	1 / 1.0	Uranium	Mining
				/		Claims
				/		
				/		
				/		
				/		
				/		

TYPE OF INSPECTION (CHECK ONE) / / MINE / XX / EXPLORATION / / MINE ABANDONMENT
/ / TECH EXAM, EA / / INACTIVE / / OTHER

PURPOSE OF INSPECTION Examination of lease to determine if necessary reclamation for relinquishment was completed.

BRIEF DESCRIPTION OF INSPECTION See attachment.

MINE NAME DESIGNATED OPERATOR

DATE ORIGINAL MINE PLAN SUBMITTED DATE ORIGINAL MINE PLAN APPROVED

DATE MODIFIED MINE PLAN SUBMITTED DATE MODIFIED MINE PLAN APPROVED

IF APPROVED PLAN IS PENDING MODIFICATION, GIVE BRIEF DESCRIPTION OF MODIFICATION:

DATE ORIGINAL EXPL. PLAN SUBMITTED DATE ORIGINAL EXPL. PLAN APPROVED

DATE MODIFIED EXPL. PLAN SUBMITTED DATE MODIFIED EXPL. PLAN APPROVED

BLM INSPECTOR(S) AND TITLES(S) George R. Tetreault, Jr., Mining Engineer; Brian Lloyd, Volunteer; John Andrews, E.S.

SURFACE MANAGEMENT AGENCY FOR TRACT(S) Bureau of Indian Affairs

NAME, TITLE, AND OFFICE OF SMA PERSONNEL PARTICIPATING IN INSPECTION None.

NAME, TITLE, AND OFFICE OF OSM OR REGULATORY AUTHORITY PERSONNEL PARTICIPATING IN INSPECTION
None

NAME, TITLE, AND OFFICE OF COMPANY REPRESENTATIVE(S) PARTICIPATING IN INSPECTION
Norm Derks

HOURS OF OFFICES TIME (PRE-INSPECTION) PREPARING FOR INSPECTION 0

HOURS OF OFFICES TIME (POST-INSPECTION) REPORTING ON INSPECTION 1

TOTAL TRAVEL TIME 2.0 TOTAL OFFICE TIME 1

WAS A CONDITION OF NONCOMPLIANCE ENCOUNTERED DURING INSPECTION? / / YES / XX / NO
IF YES, PREPARE NONCOMPLIANCE REPORT

WAS AN UNDESIRABLE EVENT ENCOUNTERED DURING INSPECTION? / / YES / XX / NO
IF YES, PREPARE UNDESIRABLE EVENT REPORT

PERSONNEL RESPONSIBLE FOR CONDUCTING INSPECTION (ORIG. SGD.) GEORGE R. TETREAULT, JR.
George R. Tetreault, Jr.

cc: Superintendent, ENA, BIA
Oper. File: Allotted (#'s above), TEDCO
IR File
File: Tetreault

Lease -8396

All reclamation has been completed. All exploration drill sites have been reclaimed. The road constructed on Haystack Mountain was reseeded and blocked. The old Federal Mine was operated on the site prior to leasing to TEDCO. There were two open adits which TEDCO agreed to reclaim. They did an excellent job of blocking and reclaiming the two adits and should be commended. Both of the former mine sites are in the range of 100-200 uR/hr. The Southwest mine site has an allottee's home on it. In the area of the two adits are hotspots that range 200-400 uR/hr. On the site of an old ore storage pad, there is a spot measuring 480 uR/hr. On the roads there are numerous hotspots between 70-100 uR/hr. In some places it looks like the company operating the mine used ore/waste to grade the roads.

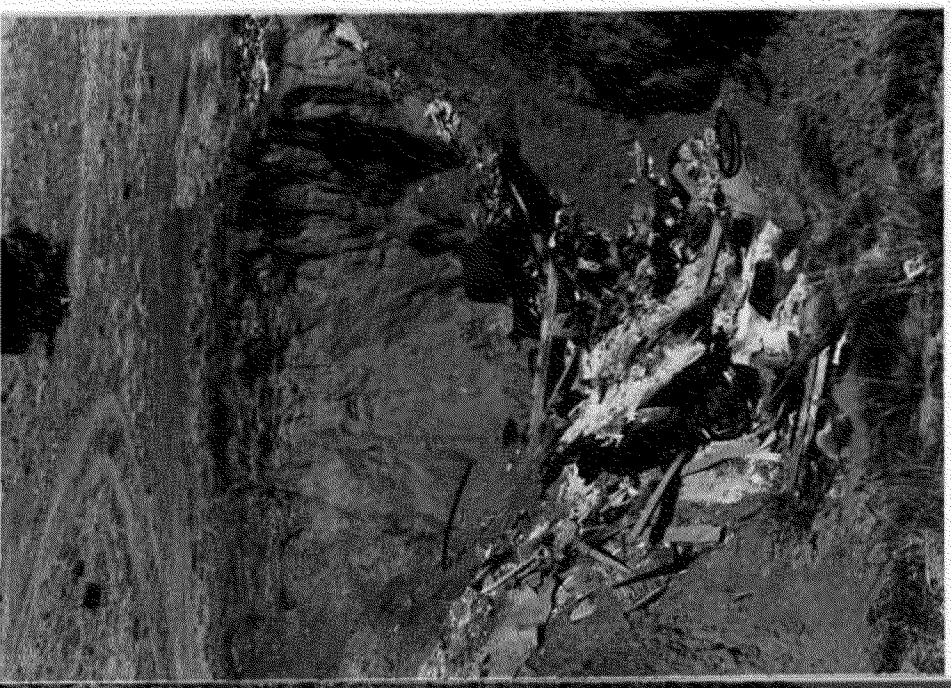
Lease -5681 Claims

All reclamation has been completed. All exploration drill sites have been reclaimed. The road constructed on Haystack Mountain was reseeded and blocked.

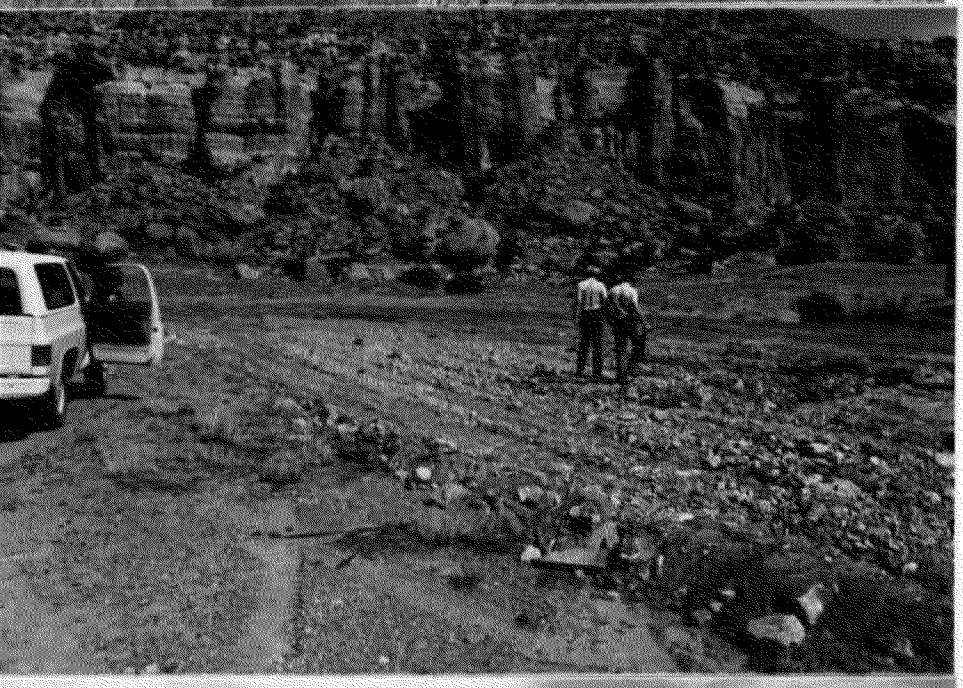
Tess 1-10

The roads constructed for exploration on these claims have been reseeded and blocked. All drill sites reclaimed.

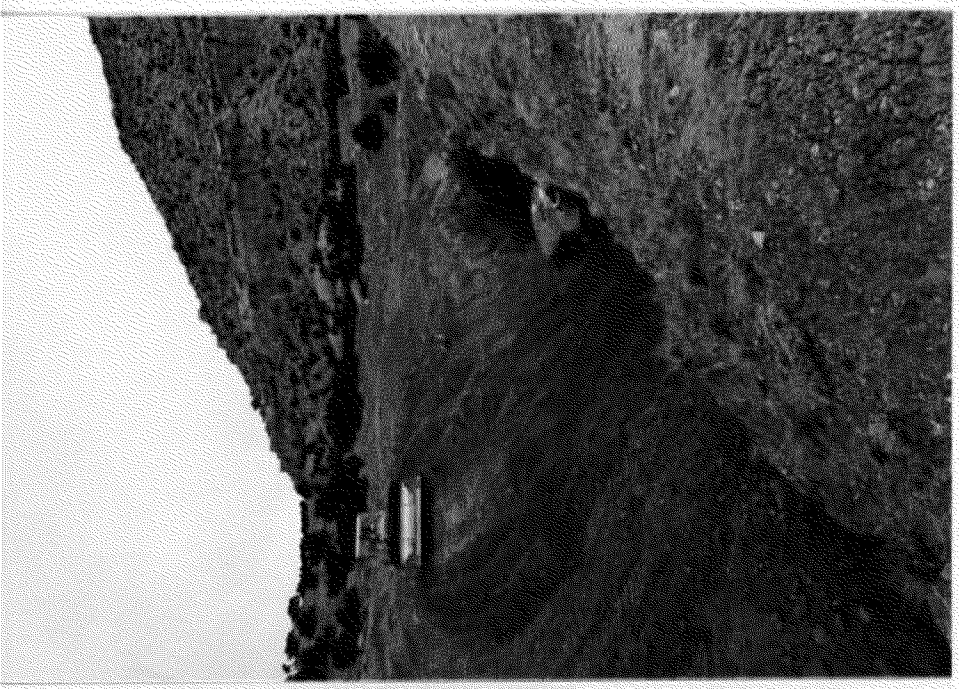
Will recommend release of these leases to BIA. Also recommend that the BIA have a radiation study done on Lease -8396 in order to determine what future reclamation should be done and which areas are safety hazards and should be avoided by the allottees.



The ore haulage adit



The reclaimed tipel and or haulage adit



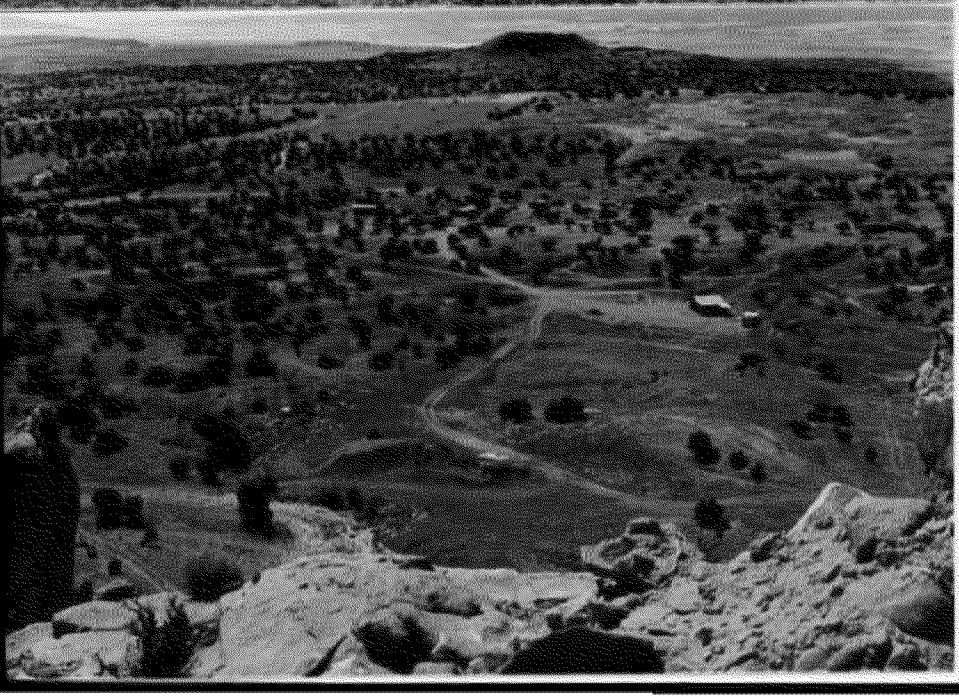
The main adit of the old Federal Mine

Reclamation of the main adit

Fully reclaimed adit

Looking east across the reclaimed main adit site

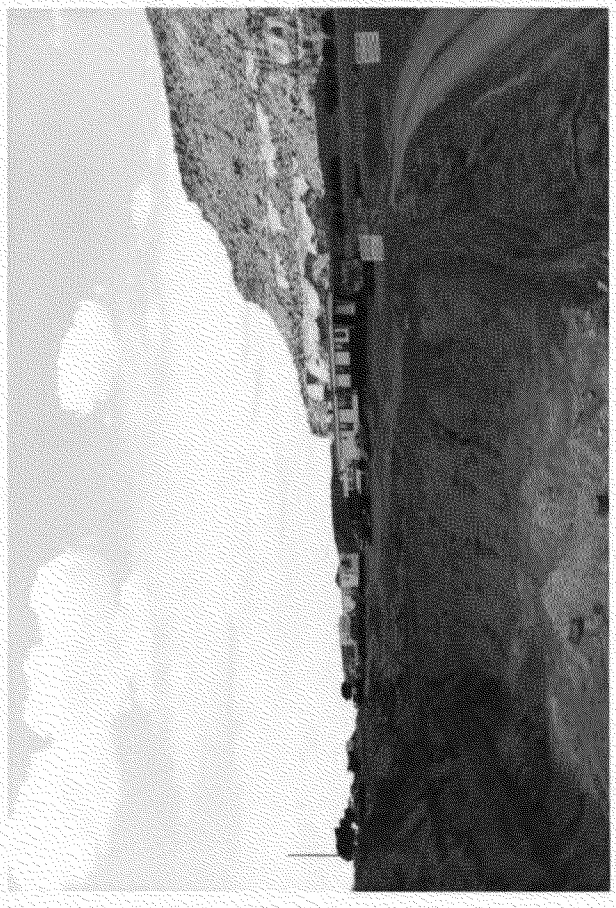
The reworked collapsed stope area

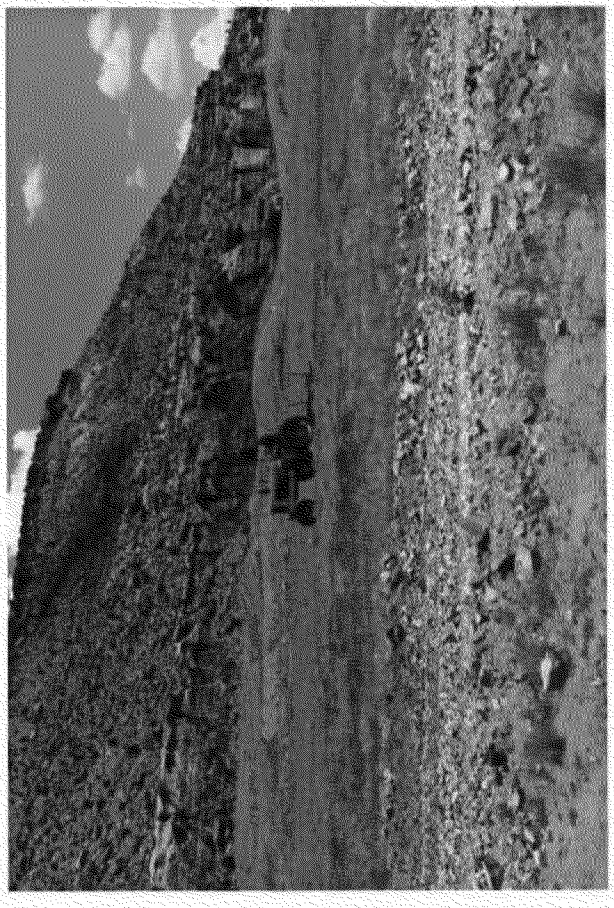


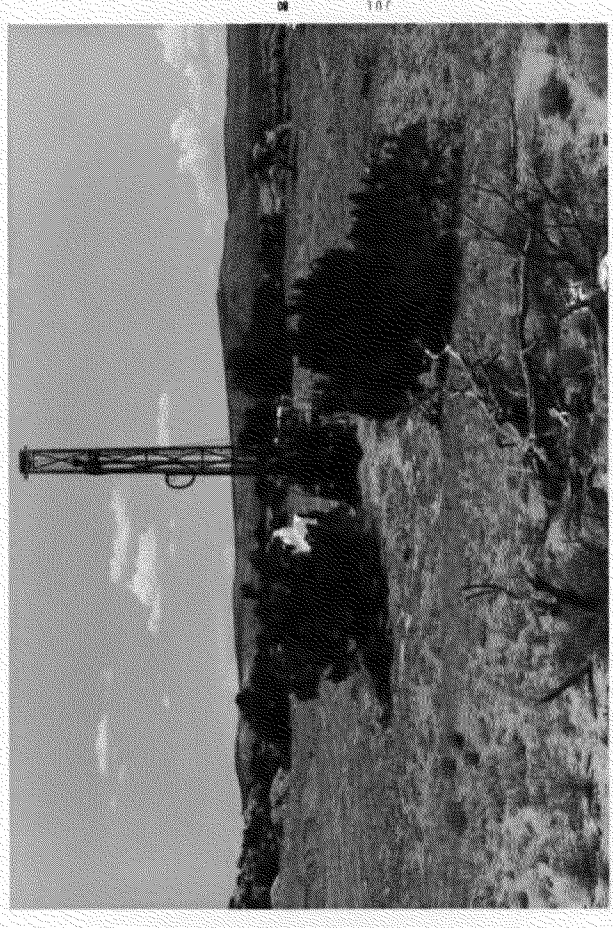
The site of the old Federal Mine:

1. Main adit 2. Ore haul adit
3. Tipel 4. Collapsed stope area
5&6. Old ore pad & waste areas


8396
inspection of 7/29/80
Jones







INSPECTION REPORT

INSPECTOR(S) David R. Sitzler, Mining Engr., USGS DATE June 3, 1980

PARTICIPANT(S) None.

LESSEE/ALLOTTEE Todilto Exploration and Devel. Corp. OPERATOR N/A

LOCATION SW/4, Sec. 18, T. 13 N., R. 10 W., N.M.P.M., NOO-C-14-20-8396

MINERAL Uranium OPN _____ PRODUCTION _____ CHECKED _____

ACTIVITY None.

ENVIRONMENT This lease is located on the southeast side of Haystack Mountain. Vegetation consists of various grasses, Junipers, Pinyons, and minor cactus. The climate is semi-arid, with annual precipitation of about 12 inches. The land is used locally by the owners for grazing.

SAFETY N/A

REMARKS This field inspection was conducted for the usual environmental analysis which is being prepared on TEDCO's original exploration plan for this lease.

ORDERS ISSUED/RECOMMENDATIONS None.

cc: Files
Reston (Thru Denver)
Area Dir., Navajo Area Office, BIA
Field File - Sitzler
DMC, Mining, SCR

INSPECTION REPORT
April 12, 1977

Mesa No. 2 Mine
Navajo Allotted Lease
14-20-0603-7240
McKinley County, New Mexico

U. S. Geological Survey
Conservation Division
Area Mining Supervisor
Southern Rocky Mountain Area
P. O. Box 1716
Carlsbad, New Mexico 88220

Dale C. Jones
Mining Engineer
May 5, 1977

The Mesa No. 2 Mine was examined April 12, 1977, to verify reports that the abandoned mine's incline portal was not sealed. The writer was accompanied temporarily by George Warnock, President of Todilto Exploration and Development Corporation (Tedco). Tedco currently strip mines uranium ore from the nearby Haystack Mine which is located on property owned by the Santa Fe Pacific Railroad Company.

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The Mesa No. 2 Mine is located at the base of Haystack Mountain in the southwest quarter of Section 18, T12N, R10W, NMPM, McKinley County, New Mexico (Map A). It can be reached by traveling Highway 66 north from Grants for approximately 17.5 miles and then a dirt road east for about 5 miles.

The quarter-section tract was formerly Navajo Allotted Uranium Mining Lease 14-20-0603-7240 which expired under its own terms October 12, 1972. The last operator of record was Cibola Mining Company which acquired the lease April 16, 1966, via assignment from Mesa Mining Company (Homer Scriven, General Manager). About 15 years prior to that, the mine was operated by Federal Uranium Company for approximately 4 years and was known as the Federal Mine. The land is not presently under lease.

The ore produced by the mining operations was located in the Todilto Limestone of Lake Jurassic Age. Production was evidently sporadic, ranging from 100 to 300 tons of ore per month according to a USGS mine inspection report of June 2, 1964. Records in this office show that Cibola Mining Company produced 141.25 tons of ore from the property in June and August of 1966 and that no further production was obtained after August 1966. According to various USGS memorandum and mine inspection reports dated as late as March 28, 1969, the mining property had not been satisfactorily conditioned for abandonment, and efforts to contact officials of the Cibola Mining Company were unsuccessful.

According to mine maps and Bureau of Mines' Health and Safety Inspection Reports, the mine consisted of two adjacent, but unconnected, underground workings which were developed through separate declines. The workings extended from the declines to the northwest, south and southwest, with the majority of the mining apparently occurring under Haystack Mountain. The northeast incline is about 280 feet long on a downgrade of approximately 22 degrees. It was equipped with a 60-horsepower, diesel-driven hoist for handling material only. The southwest decline is about 420 feet southwest of the northeast decline and was approximately 55 feet long on a gentle downgrade of perhaps about 10 degrees. This incline does not appear to have been equipped with a hoist. There were two buildings near the northeast decline, but they were removed sometime in 1964. One small plywood and tin building is still located near the southwest decline.

The portal of the southwest decline has been sealed, apparently by backfilling the opening with waste rock and dirt. Some timbering has been placed on top of the fill to support part of the portal, but there are no visible means of entry into the mine workings. The rock around the portal brow could be dangerous. The beginning cut of the incline remains open but does not appear to be dangerous as the cut is in consolidated rock. Garbage, evidently from nearby residences, is accumulating in the cut. A large pile of dirt, and possibly waste rock, is located at the entrance of the cut.

The northeast incline is partially sealed by a small cave-in at the portal, but it would be possible, and very dangerous, to enter the mine workings. The ground around the portal appears to be mostly very unconsolidated dirt which could cave very easily. This creates a safety hazard due to the close proximity of occupied residences. A flat-topped pad of waste rock and timbers is located near the incline entrance and evidently accommodated the diesel hoist. Directly behind this pad to the southeast is a small concrete pad which was evidently the floor of the small general purpose building. A low waste dump is situated southeast of the incline.

The surface area around the inclines has been distorted by various roads, grading, etc. The writer did not find any of the mine's ventilation holes, but past USGS inspection reports indicate that there are several which still remain open. The writer also did not inspect a deep trench that is about 500 feet southeast of the southwest decline. According to a USGS inspection report, this trench was made by Cibola Mining Company and abandoned by order of the State Mine Inspector. The condition of this trench is not known, but it is assumed that it too remains open.

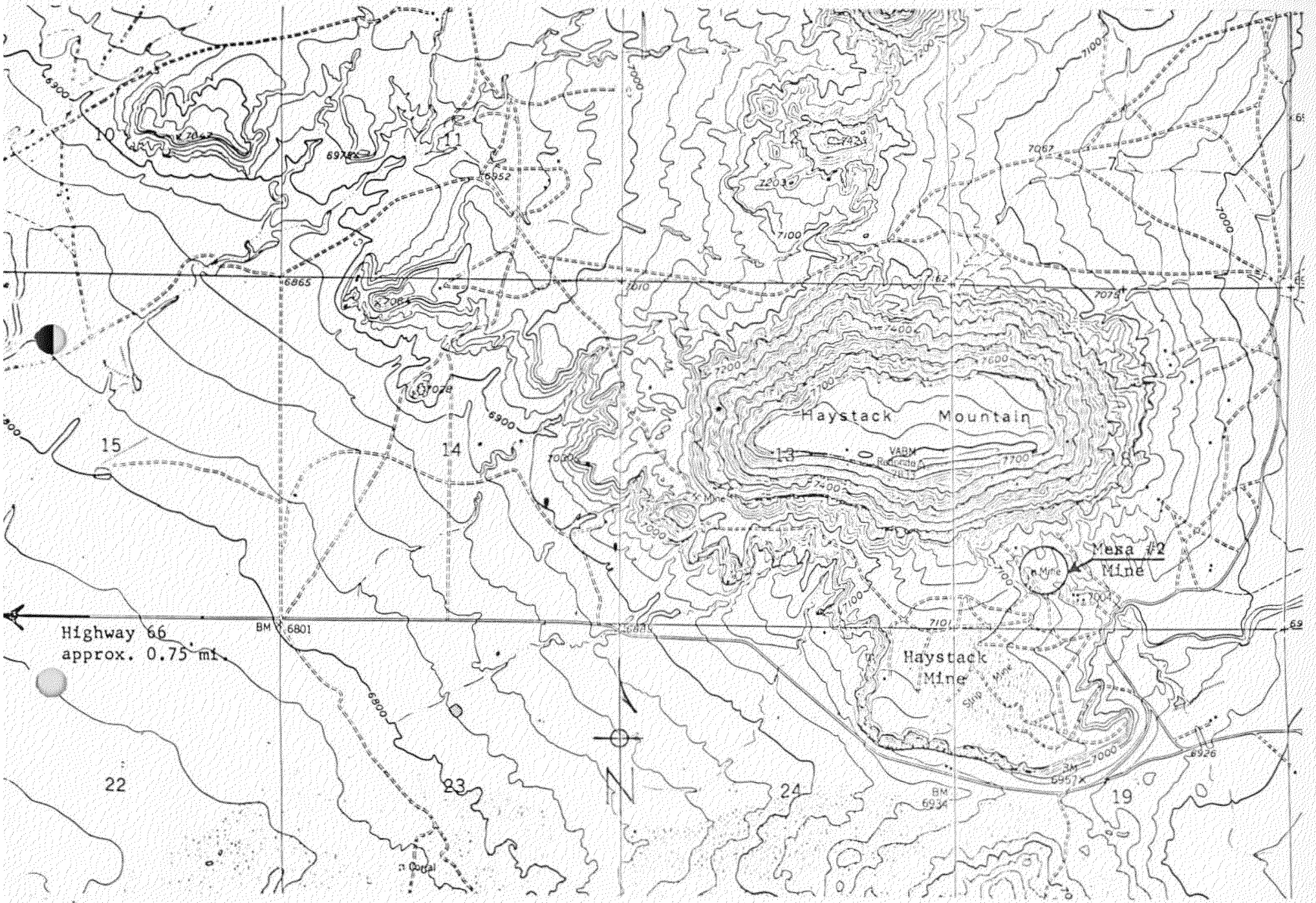
As previously stated, the involved lands are not currently under lease. The previous lease expired October 12, 1972, and it is assumed that the $2000 surety bond was also cancelled at that time. The BIA will be contacted about the exact status of the bond. However, the condition of the northeast incline constitutes a serious safety hazard, and the writer recommends that the writer recommends that the appropriate agency take immediate action to mitigate this situation. Specifically, the northeast incline portal area should be fenced to prevent access, and all ventilation holes should be located to determine their condition as they too may require fencing. In addition, the deep trench made by Cibola Mining Company should be located to determine if any immediate mitigative measures are necessary.

Mr. Warnock expressed interest in obtaining a lease on the mining property. Perhaps it would be in the best interests of the landowner, in regards to both safety and potential royalty income, to consider the negotiation of a mining lease with Tedco. As mentioned previously, Tedco operates the Haystack Mine about 0.5 miles to the south-southwest.

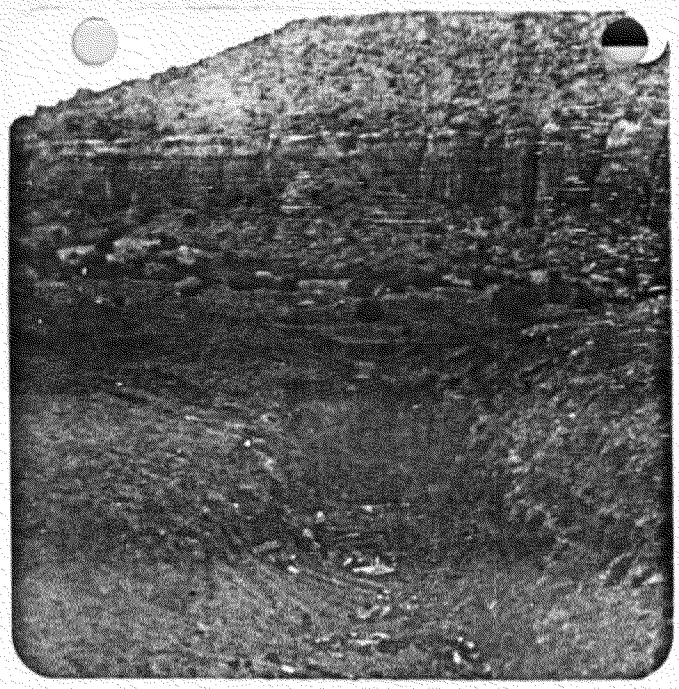
Dale C. Jones
Mining Engineer

DCJ:cj

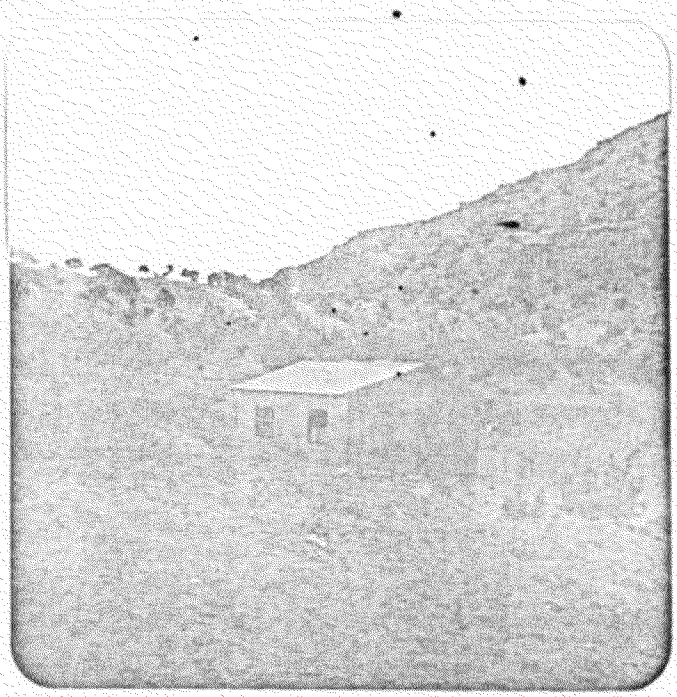
Orig. to: Superintendent, Eastern Navajo Agency, BIA
cc: Area Director, Navajo Area Office, BIA
Chief, Branch of Mining Operations, USGS
Through: Conservation Manager, Central Region, USGS
Area Mining Supervisor, SRMA, USGS
Files ✔



Map A
Mine Location Map

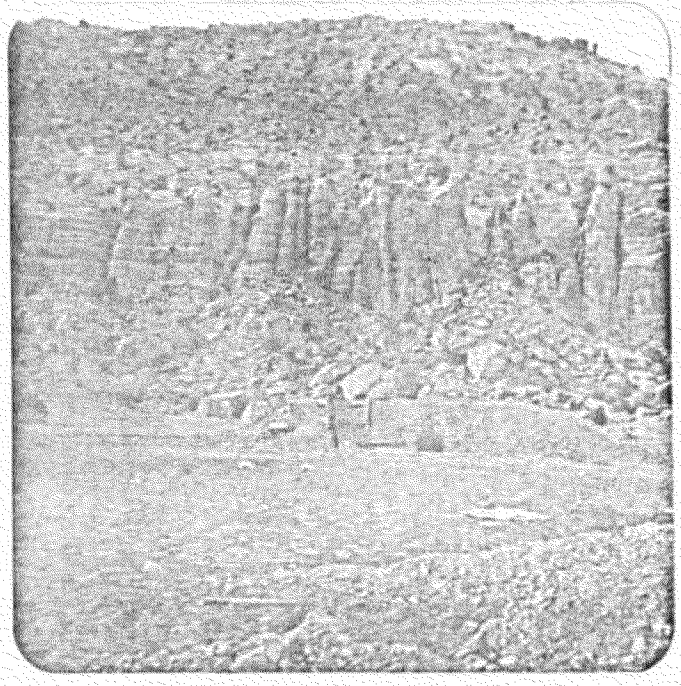


Southwest incline of Mesa No. 2 Mine
(looking NNW); Haystack Mountain in background



Small mine building near southwest
incline shown in photo above

Northeast incline of Mesa No. 2 Mine (looking NNW from top of hoist pad). Base of Haystack Mountain in background; Timbers of hoist pad visible in lower left corner of photo



Hoist pad directly behind northeast incline; Haystack Mountain in background; part of waste dump visible in lower right corner of photo

Looking down into northeast incline, just past portal cave in; entry to incline possible through hole (arrow)

Same as photo above from a different angle; hole (arrow) is the same as in photo above